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Southeastern Pennsylvania Transportation Authority
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September 9, 2011

Federal Communications Commission
Wireless Telecommunications Bureau
445 12th Street, SW
Washington, DC 20554

Dear Chairman Genachowski:

The Southeastern Pennsylvania Transportation Authority (SEPTA) is providing the following comments in response to the Commission's May 5, 2011 Public Notice regarding Spectrum Needs for the Implementation of the Positive Train Control Provisions of the Rail Safety Improvement Act of 2008 (WT Docket No. 11-79).

SEPTA is a multi-modal transit system and is the nation's sixth-largest public transportation agency. SEPTA's service area encompasses approximately 2,202 square miles and operates a vast network of fixed-route services. SEPTA's Railroad Operations serve the Greater Philadelphia region as well as parts of Delaware and New Jersey, with a network of thirteen regional rail lines.

SEPTA has requested that Congress extend the deadline for Positive Train Control (PTC) implementation until December 31, 2018 to allow systems adequate time to deploy a reliable, interoperable and safe PTC system across the nation's rail network.[1] Although spectrum is not a direct risk factor to SEPTA's successful PTC implementation, the following comments are being provided because the unavailability of spectrum may pose a risk of interoperability. Additionally, the associated costs with implementing PTC represent another significant challenge to SEPTA.

Interoperability

SEPTA received FRA approval for its PTC Implementation Plan and is progressing toward completion by the December 31, 2015 statutory deadline. SEPTA plans to implement a PTC system that will utilize radio frequency spectrum in the 217-222MHz range, which has been adopted industry wide as the frequency that will best achieve interoperability between systems for PTC. Additionally, each of the commuter railroads sharing trackage on the Northeast Corridor, of which SEPTA is one, has adopted Amtrak's positive train control system, Advanced Civil Speed

[1] SEPTA submitted comments to the Subcommittee on Railroads, Pipelines and Hazardous Materials of the House Committee on Transportation and Infrastructure in response to the hearing held on March 17, 2010 "Federal Regulatory Overreach in the Railroad Industry: Implementing the Rail Safety Improvement Act." (Attached)

Enforcement System (ACSES), which intends to utilize spectrum in the 217-218 MHz and 219-220 MHz range.

SEPTA believes that the FCC or a designee should assume the responsibility for frequency coordination to make the best use of the limited available spectrum. SEPTA has significant concerns that any effort to locate PTC communication outside the 217-222 MHz range could jeopardize interoperability and ultimately be a risk factor in successful PTC implementation. Notably, portions of SEPTA's trackage are shared with CSX, Norfolk Southern and Amtrak. Many other commuter railroads share trackage with multiple carriers making the issue of interoperability even more likely in the dense, metropolitan areas where the acquisition of adequate spectrum in the industry-approved frequency range may be more of a challenge.

Cost of PTC Implementation

Beyond interoperability issues and meeting the implementation deadline, the costs associated with PTC represent SEPTA's most significant challenge. In order to meet the 2015 PTC deadline, the Authority will need to issue an RFP for construction and installation no later than the end of 2011. SEPTA conservatively estimates that the cost of implementing PTC will be in excess of $150 million which does not include the $216 million SEPTA has or will invest to implement Automatic Train Control (ATC) across its system. SEPTA's FY 2012 capital budget is approximately $310 million, which stands in stark contrast to its $4.2 billion existing state of good repair backlog.[2]

Unless the 2015 deadline is pushed back, SEPTA will be forced to hastily implement this nascent technology at the expense of other safety and operationally essential projects throughout its system. Therefore, the incremental safety benefits that will be achieved by implementing PTC as an overlay to ATC are called into question since they will force SEPTA to indefinitely delay other critical infrastructure repairs. By way of example, many of SEPTA's commuter rail power facilities date back to the early 1920's. Additionally, SEPTA owns over 300 bridges which have an average age exceeding 80 years. The impending PTC deadline and current capital funding will not allow for a single bridge or substation to move into construction during FY 2011 or FY 2012.

A three year extension to implement PTC would free up approximately $40-$50 million over the next four years allowing for critical safety improvements to SEPTA's infrastructure. The significance of this funding becomes even more vital if federal funding for public transportation is reduced from its current levels in the next Fiscal Year. More specifically, if federal transit formula programs would be reduced by 30%, as has been proposed in House versions of the FY 2012 budget and transportation reauthorization, the implementation of PTC would consume approximately 25% of SEPTA's over-all four-year capital budget.

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[2] *See* Federal Transit Administration's 2010 *National State of Good Repair Assessment.*

SEPTA urges the Commission and the Wireless Telecommunications Bureau to move expeditiously in identifying a resolution to the radio frequency spectrum availability and allocation issues presented by our peer agencies. Moreover, if adequate spectrum in the 217-222 MHz range cannot be made available in a timely manner, SEPTA requests that the Commission report to Congress that radio spectrum availability remains an impediment to nationwide PTC implementation.

Sincerely,

Joseph M. Casey
General Manager

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STATEMENT OF

JOSEPH M. CASEY, GENERAL MANAGER

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

PHILADELPHIA, PENNSYLVANIA

SUBMITTED TO

SUBCOMMITTEE ON RAILROADS, PIPELINES AND HAZARDOUS MATERIALS

OF THE

HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

"FEDERAL REGULATORY OVERREACH IN THE RAILROAD INDUSTRY:
IMPLEMENTING THE RAIL SAFETY IMPROVEMENT ACT"

MARCH17, 2011

Southeastern Pennsylvania Transportation Authority
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Submitted: March 30, 2011

Chairman Shuster, Ranking Member Brown and Members of the Subcommittee on Railroads, Pipelines and Hazardous Materials, thank you for the opportunity to submit written testimony on the Rail Safety Improvement Act and the Southeastern Pennsylvania Transportation Authority's[1] (SEPTA) experience thus far implementing Positive Train Control.

Since the October 2008 passage of the Rail Safety Improvement Act (P.L. 110-432), SEPTA has been working with the Federal Railroad Administration's Railroad Safety Advisory Committee (RSAC) and in coordination with our commuter rail partners to meet the Positive Train Control (PTC) mandate by the December 31, 2015 statutory deadline. At the time of the RSIA's passage, the industry supported the goal of PTC implementation and the enhanced safety this new technology provides, but was uncertain as to how to achieve Congress's timeline. Nearly two and a half years into the PTC mandate, SEPTA remains committed to installing a viable and reliable PTC system; however, matters relating to the availability of PTC technology, interoperability, funding, and the impact of accelerated PTC implementation on other system-wide safety and state of good repair efforts are still unresolved. In submitting our implementation plan as required by the RSIA and established in the FRA's January 2010 PTC final rule, we suspected then what has become clear now, that significant challenges exist both in terms of technological issues and possible escalation of costs.

In order to meet the legislatively mandated 2015 deadline and the timeline established in our own PTC Implementation Plan, SEPTA will need to commit to its PTC third party contract no later than late summer 2011 to secure the technical expertise and manufacturers'

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[1]The Southeastern Pennsylvania Transportation Authority (SEPTA) is the nation's sixth-largest public transportation system. The Authority is an instrumentality of the Commonwealth of Pennsylvania, created by the State Legislature, and is a vital regional asset. SEPTA's service area includes the heavily populated southeastern Pennsylvania counties of Bucks, Chester, Delaware, Montgomery, and Philadelphia. This area encompasses approximately 2,202 square miles. The SEPTA system serves over one-half million customers daily and provided approximately 330 million (unlinked) passenger trips in Fiscal Year 2009. SEPTA's service also extends to Trenton and West Trenton, New Jersey and Newark, Delaware.

SEPTA is a multi-modal transit system as it provides a vast network of fixed-route services including bus, subway, subway elevated, regional rail, trolley, and trackless trolley, as well as customized community service. In Philadelphia, City Transit Operations serves a network of 84 subway-elevated, trolley, trackless trolley and bus routes. In Fiscal Year 2009, approximately 928,000 (unlinked) passenger trips were generated per weekday.

SEPTA's Railroad Operations serves all five counties with a network of thirteen regional rail lines, serving approximately 124,000 (unlinked) passenger trips per day in Fiscal Year 2009. This service also operates to Newark, Delaware and to Trenton and West Trenton, New Jersey.

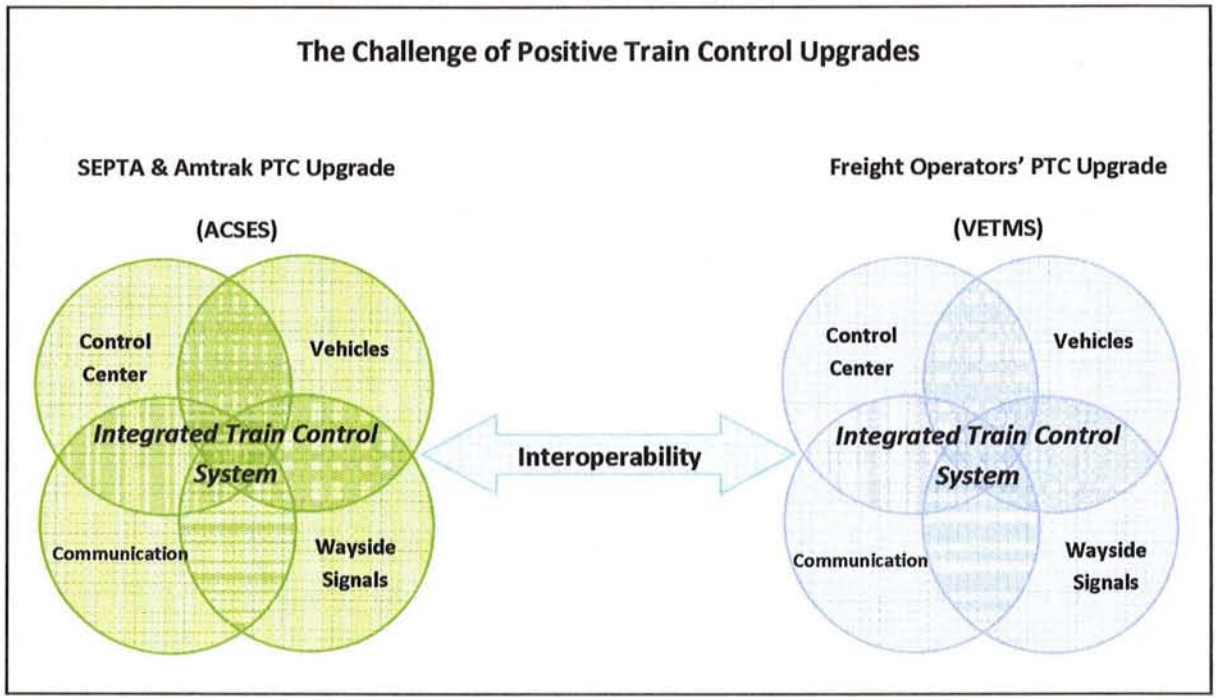
commitments to take delivery of all materials and services that will be required to meet the mandate. SEPTA, therefore, joins the American Public Transportation Association (APTA) and the majority of the nation's commuter railroads in requesting that Congress extends the PTC implementation deadline to December 31, 2018. Extending the PTC implementation deadline would allow SEPTA and other commuter rail agencies to efficiently implement PTC without major service interruptions while gaining the flexibility to simultaneously address other safety-critical infrastructure needs.

While SEPTA continues to lay the financial, engineering, and technical groundwork necessary to meet the ambitious PTC deadline, the Authority is also maintaining its commitment to an already-extensive program to install Automatic Train Control (ATC) system-wide by 2015. ATC, which uses continuous cab signaling and locomotive-based electronics to execute speed controls based on operator behavior and track conditions, is a quantum leap forward in train control safety, replacing track-side Automatic Block Signaling systems. SEPTA's ATC initiative, undertaken without federal prompting, and accelerated in response to the passage of the RSIA, will provide the platform for SEPTA to implement its own FRA approved PTC system. From 2000 through 2015, SEPTA will have invested $215 million in track signal technology and interlocking upgrades throughout its commuter rail network, including $120 million to convert 210 miles to ATC.

Like other commuter systems operating on or connecting to the Northeast Corridor, it is necessary that SEPTA build its PTC system off of the FRA-approved PTC system Amtrak is installing – Automatic Train Control with a Positive Train Control overlay. ATC is a substantial safety improvement in its own right and by effectively completing its ATC rollout, SEPTA is making a very prudent investment in future PTC success.

Available technology and Interoperability, however, remain the biggest impediments to PTC scheduling and budgeting. SEPTA commuter trains and freight carriers share trackage throughout the SEPTA commuter network, and while the Northeast Corridor transit authorities such as SEPTA must follow Amtrak's FRA-approved PTC system, freight carriers are all working

towards developing PTC systems that are based on entirely different technology and design principles that accommodate the unique freight operating environment. Significant changes are already coming to the four major elements – control center, communications networks, vehicles, and wayside signal controls – routinely used to provide safe and reliable rail operations at SEPTA and other commuter properties. These changes will require extensive hardware and software overhauls to achieve internal integration. And that is the easy part. Implementing PTC technology that is interoperable with other rail systems operating over shared trackage presents problems on multiple levels.



The United States Government Accountability Office's December 2010 report, *Federal Railroad Administration Should Report on the Risks to the Successful Implementation of Mandated Safety Technology*, highlights a number of the persistent concerns related to interoperability and the industry's uncertainty that PTC, and specifically the interoperability mandate, can be achieved by the deadline, given the well-documented and overwhelming challenges. SEPTA is legitimately concerned that despite what would be an exhaustive effort on our part to implement PTC by the December 31, 2015 deadline, we could still be found non-compliant due to other systems' delays and technical issues beyond our control. In setting a date certain

without determining whether the elements for successful implementation would be available or that thoroughly vetted technology would exist, Congress is asking the railroad industry to take a considerable financial leap of faith at a time when commuter railroad budgets simply cannot afford the risk.

As a multi-modal public transportation agency continually facing the challenge of maintaining aging operational infrastructure, SEPTA is uniquely impacted by the financial implications of regulations, where requirements of one mode can have unintended, negative consequences for other system safety priorities and efforts to bring assets of another mode to a state of good repair. The costs and timing of Positive Train Control present such a circumstance. SEPTA conservatively estimates that the financial burden imposed by Positive Train Control will be in excess of $100 million, not including the Authority's $120 million Automatic Train Control commitment. SEPTA's commuter rail and rail transit power facilities date back to the 1920's and 1930's while our 300-plus bridges have an average age exceeding 80 years. Despite the age of this infrastructure, current capital funding will not allow for a single bridge or substation to move into construction during FY 2011 or FY 2012.

In its 2009 *Rail Modernization Study*, the Federal Transit Administration (FTA) estimated that the nation's seven oldest and largest transit systems, which includes SEPTA, face a $50 billion state of good repair backlog. The FTA's follow-up study, the *National State of Good Repair Assessment* (2010), found the backlog for all transit systems across all modes is $77.8 billion. SEPTA will have roughly $310 million for capital projects in FY 2012, funding levels that stand in stark contrast to documented capital needs of several billion dollars ($4.2 billion using FTA collected data) throughout the system. Meanwhile, SEPTA engineers estimate that a three year extension to implement PTC would free up approximately $40-50 million over the next four years, allowing for critical safety improvements at a time when the Authority has limited budgetary flexibility.

APTA's preliminary assessment of the costs associated with commuter rail PTC compliance is more than $2 billion. Though not a comprehensive solution for commuter railroads struggling

to fund their PTC implementation programs, SEPTA encourages Congress to fund the Rail Safety Technology Grant Program at least at authorized levels ($250 million over five years). This grant program is vital for the significant, remaining PTC research and development still required and to support the efforts of commuter railroads moving forward with accelerated implementation schedules. However, the PTC implementation grant has only received funding during one appropriations cycle (FY2010) and the House-passed FY2011 full-year continuing appropriations bill provides no funding for the current fiscal year while rescinding grants awarded in 2010.

SEPTA remains committed to adding Positive Train Control to augment our existing system safety technology and operating procedures. It is imperative, however, that this integration occur in an efficient and organized way that capitalizes on proven technology and industry best practices while not risking operations. The hurried pursuit of the Rail Safety Improvement Act's PTC deadline in the face of finite technical, material, and radio spectrum resources holds the potential for significant cost overruns and the erosion of public confidence in overall rail reliability and safety.

SEPTA urges Congress to immediately pass an extension of the December 31, 2015 PTC deadline or provide the Secretary of Transportation the flexibility to approve extensions based on systems' progress and efforts to achieve PTC. The current data and anecdotal evidence provided by many railroads indicates that the prospects for industry-wide PTC compliance are still uncertain. By extending the deadline through 2018, now, Congress will reaffirm its unwavering support of commuter rail safety and service while affording agencies the opportunity to successfully advance Positive Train Control but not at the exclusion of other critical safety improvements.

Thank you, again, for the opportunity to submit these comments for the record. I look forward to working with you to promote long term commuter rail safety and efficiency.